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# **Governance Innovation in Civil Registration Record in Indonesian Local Government**

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**Abstract:** Governance innovation describes elements of the innovation process in government activities. Innovation needs to be well managed to show the results and benefits. Not only driven by using technology, innovation can be in activities that are considered new. This article aims to provide a comprehensive understanding of governance innovation in civil registration records in Indonesian local government. Using qualitative descriptive analysis to describe the characteristics and explore various possibilities of disruption and support factors. The results of the study claim that governance innovation affects providers, users, and recipient of innovation itself. Policy factors, leader's knowledge capacity, authority decentralization, and citizen participation affect governance innovation, also geographical constraints contribute to ineffective use of technology.

**Keywords:** Governance, Innovation, Public Service, Civil Registration Record

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## **1. Introduction**

Currently, a term of transformation, modernization has been manifesting in government activity change. The emergence of a digitalization era claimed to provide rapid change.

Smart cities, open government, government 4.0, adaptive government are an evolution of traditional government concept. Consequently, the government reform movement facilitates these changes with forms of innovation in government activities. Innovation not only tells about adopting ideas or ways was considered new (Rogers, 1995), but how can innovation be integrated into government organization system through governance innovation (Anttiroiko, Bailey, & Valkama, 2011). In this article, particular attention is given to governance innovation civil registration records sector in Indonesia local government.

Indonesia experienced several transformations in civil registration record that continued to change over time. In 2011, civil registration record management had made use of electronics (e-ID), the primary goal is budget efficiency, and data manipulation prevention. Before 2011 civil registration recording was done manually. Paper and colors of different sizes were used as an attempt at transformation; however, data recorded often created inaccurate information, because the record-keeping system was mainly concentrated on a local level, and was not nationally integrated. e-ID CARDS applied by Indonesia has an advantage compared to countries such as China and India. China uses only individual data chip which is limited without biometric data; India is using system UID (Unique Identification Data) for data management through a hotspot service. However, e-ID CARDS Indonesia (*e-KTP*) combines advantages of other, i.e., chip as individual data, biometric (fingerprint and iris of eye) and UID (UID, family card number) and until now recording process has been carried out in more than 6,214 sub-districts in Indonesia.

Because e-KTP has several advantages as a single identity and anti-data manipulation, its use has also spread as a condition to take care of various things in other institutions such as the banks, social security, and general elections. Also, changes in data that continue to occur from time to time force government to have accurate population data. Through civil registration records, accurate data can be used to map quantity of poor population, revenue, elections, terrorism prevention, disaster victim identification, health programs, and for formulating strategic policies. Therefore, civil registration records need to be managed in a modern manner with a legal basis. Act Republic of Indonesia Number 24/2013 about Population Administration mentions that in its implementation it must meet information technology standards. National policies regulate the registration, printing, data storage processes, and population documents distribution. However, local government is given authority to carry out the registration process, and document distribution in different ways. Some local governments like *Aceh Tenggara*, *Batang Hari*, *Tanah Datar* regency, *Surakarta* city, and *DKI Jakarta*, to accelerate the registration process and document distribution by utilizing technology.

The use of digitalization in civil registration provides greater benefit management. We believe the use of technology in government activity will encourage efficiency and this is something that continues to grow globally. Siddiquee (2008) in his study in Malaysia found that e-government in providing services improved public services quality and performance. Osei Kojo (2016) study in Ghana confirmed that e-government potential is improving public services with increasing efficiency, reduce operating costs, and expand access to services. In Greece, e-government services provide benefits to citizens and businesses with efficient resources management and organizational processes (Caloghirou, Protogerou, & Panagiotopoulos, 2016). However, in practice, electronics use in government activity is not necessarily producing more significant benefits.

Thailand for example, availability, and information confidentiality generated by e-government seems to make people feel less confident in using e-government (Funilkul, Chutimaskul, & Chongsuphajaisiddhi, 2011). The use of technology in government activities facilitates performance and limits chain bureaucracy procedure. E-government

adoption can explain regarding usability, subjective norm perceptions, usage, credibility, attitude, provider and recipient behavior (Mahmood, 2013).

In fact, in selected study areas, although electronically based, there are still many citizens who have not registered. For example, Aceh Tenggara regency, in January (2017) there were 21,058 people who had not carried out civil registration that exceeds 4,000 births per year (BPS, 2017). Nationally there are about 9.3 million people who are not registered or equal to 5 percent of national population (Andayani, 2017). Causality such as bureaucratic procedures, low awareness causes people not to report changes in population data consistently. In general, free registration is performed starting from the village level (Ball, Butt, & Bealey, 2017). Not only policies that affect (Singh et al., 2012), local collaboration also determines civil registration record will be carried out (AbouZahr, et al., 2015). On the other hand, Hansen (2011) demonstrates that the use of electronics in civil registration records is necessary to meet new political and administrative needs.

Therefore, using technology is also claimed as an innovation manifestation (Damanpour, 1996; Siddiquee, 2008; Arpaci, 2010; Gobble, 2016). One of many innovation elements is governance innovation (Hartley, 2005; Moore & Hartley, 2008; Anttiroiko, Bailey, & Valkama, 2011; Norris, 2014; Scupola & Zanfei, 2016). Governance innovation will give failure consequences, success, and effectiveness of innovation implementation (Alberti & Bertucci, 2007; Berman, 2007; Choi & Chang, 2009, see also Afuah, 2003; Anttiroiko, Bailey, & Valkama, 2011). A more concrete definition from some arguments that governance innovation shows the ideas/way/experiments that are considered new, and can help to achieve better coordination and a general result. Another argument suggests that using of electronics tend to be unsuccessful if management is not right, specific mechanisms must do whether in collaboration, partnership or cooperation with the private sector (Hill & Hupe, 2002; Klareskov & Nikolov, 2007; Anttiroiko, Bailey, & Valkama, 2011).

Experts, practitioners, and researchers earlier had laid a foundation for our understanding of how governance innovation show more significant results. This article aims to provide a comprehensive understanding of governance innovation civil registration records in Indonesian local government, and we focus on revealing disruption and support factors. However, not all innovations will show the same results when they are carried out in different places and many factors influence it. The simplicity of governance innovation will lead to how the government can manage innovation in innovative ways that involve various supporting elements. Therefore, significance of governance innovation is to avoid failures, so that to have implications for public service quality. Governance innovation can be a pathway to understanding how innovation can be managed and used widely with a better understanding in era of digitalization to achieve complex decisions with holistic understanding. The main research question addressed in this article is, what factors support and disrupt innovation to show more significant results?.

## **2. Methodology**

This research article adopts a qualitative descriptive analysis to describe the characteristics of what was studied. Like most of empirical social research, a descriptive analysis would like to get a better understanding of a research topic (Babbie, 2011). The reason behind that, qualitative descriptive analysis plays an essential role in maintaining the facts so that we can explore and critically analyze some phenomena that surround research object. Also, we use an approach that is driven by theory for topics investigation and analysis presented. Semi-structured interviews (policy actors, and citizen as provider and recipient) and observations conducted in local government

institutions directly (Aceh Tenggara, and DKI Jakarta). These two study areas were selected to develop a further understanding. The reasons for choosing these two selected area are: *First*, we want to describe the differences between the regions and *secondly*, different areas may influence ease of information technology access caused by geography. *Finally*, regional conditions affect public perception of all government activities caused by critical levels and knowledge.

Then we critically review and analyze scientific literature using books, journal articles, official government portal, and government regulations to develop a conceptual framework that is appropriate. Also, developing the right argument by analyzing several previous studies, this study also refers to some cases that were deliberately chosen and treated as evidence. The data collected is then analyzed and interpreted using triangulation analysis to attract propositions carefully (Flick, 2009; Creswell, 2013). The last step is presenting the results through descriptive discussions to describe a phenomenon and its characteristics.

### 3. Discussion

#### 3.1. Governance Innovation Overview

Governance is a word common to assess good governance, spread widely in various disciplines (Bevir, 2012). Governance theory is very rarely found in innovation literature (Moore & Hartley, 2008), but we can conceptualize and understand governance innovation on contextual basis (Anttiroiko, Bailey, & Valkama, 2011). In general, governance is an overall rules pattern (Anttiroiko, et al., 2011), this is a fundamental principle applied to any organization. For example, governance usually opens and undermines state as a monolithic entity concept. The modern government requires governance to implement policies in many sectors, involving stakeholders, citizen participation, and collaboration to create a public service quality.

After administrative reforms in many countries, change is considered a way of increasing attention to the causes and consequences of social change in society; changes often associated with adoption and innovation assimilation. Innovation does not just focus on changes in certain things through the innovation process, as well as how to use governance innovation as normative standards. Therefore, innovation represents the novelty of doing things in a way that is better than ever before in public administration (Bovaird & Löffler, 2009; Anttiroiko, et al., 2011). Some arguments reveal that governance innovation at least discusses elements of policy-makers, managers, and citizens (Hartley, 2005). Anttiroiko, et al. (2011) argues that governance innovation is related with democratic, managerial, development, and service function of government. Others discuss governance innovation in form of government policy support (Alberti & Bertucci, 2007; Klareskov & Nikolov, 2007). Those elements will represent government activity to produce a product. In public administration, producing a product refers to as "public service" (Borins, 2008; Farazman, 2009; Denhardt & Denhardt, 2015). Walker, Jeanes, and Rowlands (2001) provide a view, public service organizations are now expected to innovate in their services delivery. For a government, innovation becomes a requirement to present an excellent public service.

Innovation can no longer be viewed solely as a change. However, innovation should be managed using innovative means, so that innovation can produce good public service and utilized continuously. Governmental activities including innovation are always driven by policy (Siddiquee, 2008; Daniels, Ustyuzhantseva, & Yao, 2017). The government policy will revise the leader's managerial ability, related to policy implementation (DuBrin, 2006). This capability will involve various joint roles between the legislature, other institutions, and private sector towards further application and

development. Sorensen and Torfing (2011) argue that collaboration between those involved in innovation will improve internal and external communication, impacting or having a positive effect on innovation. In this study, we focus on the managerial ability to affect policy decisions, cross-sector cooperation and capacity (government to government or government to business) also known as policy instruction.

At present, technology utilization has spread to different areas for easy accessibility, functionality, and productivity. Public services need more than technology utilization, how technology can work with different procedures that had to be maintained. Therefore, technology will also change standard procedures, and force institutions to adjust (Berman, 2007; Arpaci, 2010; Fishenden & Thompson, 2012). On the other hand, technology cannot be based entirely on the technological equipment; therefore, human resources occupy a very important role. To move towards better technology utilization, requires collaboration and utilizing a partnership with other institutions for mutual benefit (Alberti & Bertucci, 2007; Anttiroiko, Bailey, & Valkama, 2011; Sorensen & Torfing, 2011). In addition, the government also benefits by facilitating public access and participation to interact (Fung, 2008; Bryson et al., 2012).

### ***3.2. Governance Innovation Civil Registration Record in Indonesian Local Government***

Innovation is influenced by many factors which occur in interactions between organizational elements that may refer to as the innovation system (Fagerberg, 2004; Berman, 2007). It is considered by many to be a useful analytical tool for a better understanding of innovation for production and knowledge distribution (Edquist, 2005). Governance is involved in the pattern of rules and a set of principles, organizational adoption, and carried out by stakeholders. In practice, innovation will apply new mechanisms and institutional arrangements to produce good governance (Bovaird & Löffler, 2009; Bevir, 2012). The public sector is interested in innovation because of its unlimited need to increase public service productivity, effectiveness, and efficiency (Anttiroiko, et al., 2011; Torfing & Triantafillou, 2016) including changes in institutional form that may go beyond certain institutional boundaries. In particular, governance innovation tends to have a role in:

- a. Reduce organization boundaries and expanding production-based collaboration and cooperation perspective;
- b. Problem-solving broader issues such as policy-making process and increase budget and human resources;
- c. Relate to government capacity, implicitly show a complex socio-political relationship;
- d. Transform decisions about using certain public assets that relate to public interest and using individual resources;
- e. As an analytical framework specifically for evaluating a successful innovation, expanding equity, citizen participation, and development.

Thus, governance innovation will provide consequences of success and failure of innovation. Innovation can be carried out and developed through collaboration that continues to maintain with the private sector and other institutions (Alberti & Bertucci, 2007; Torfing & Triantafillou, 2016). Involvement of various sectors in government activities no longer can be considered as a partner, but the government will always learn from excellence and try to apply rational governance innovation principles. When the government changes governance in the right way, innovation can be encouraged for the benefit of provider and recipient. Thus, the balance between different governance paradigms will affect public innovation production and bring new solutions that will outperform (Torfing & Triantafillou, 2016). Anttiroiko, et al. (2011) mentions the



application areas of governance innovation, such as democratic, managerial, development and service functions of government. Therefore, governance innovation must be identified (Figure 1).

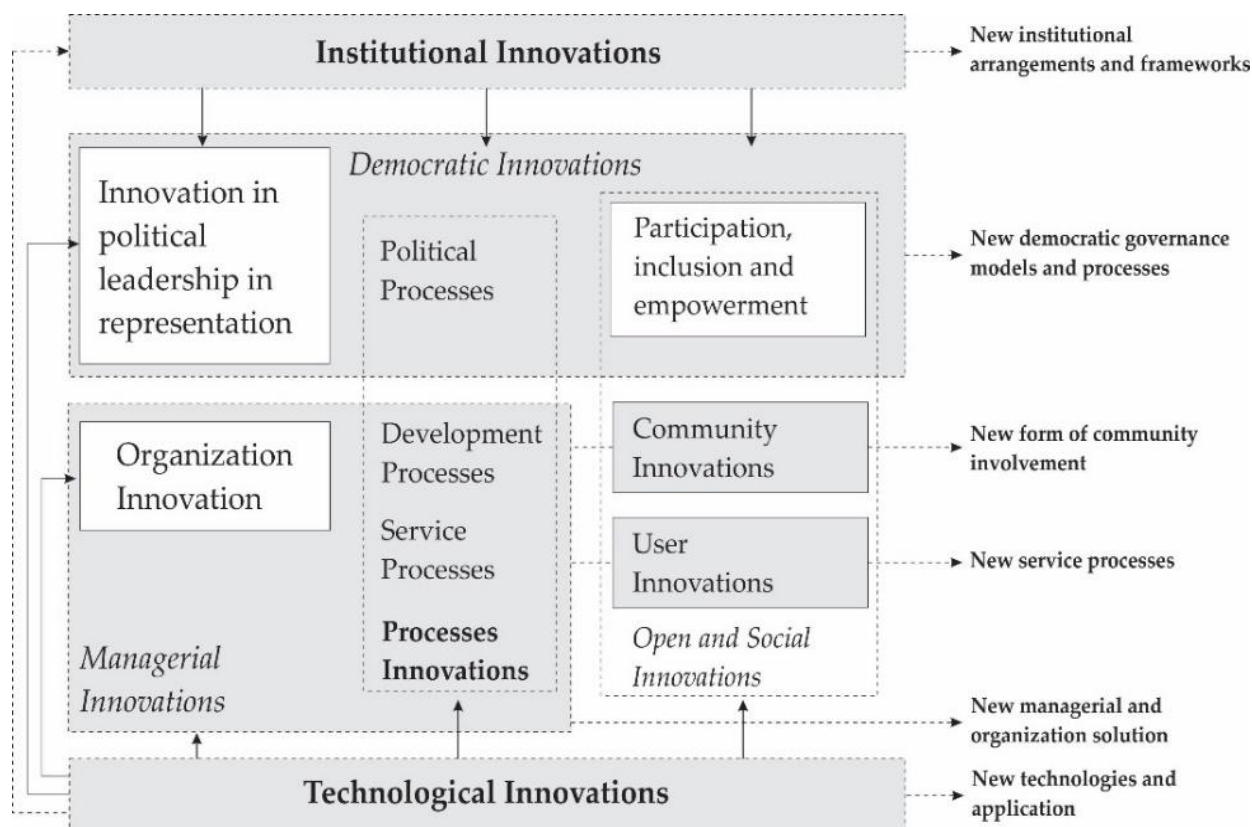


Figure 1: Innovation Concepts in the Field of Public Governance by Anttiroiko, Bailey, and Valkama (2011)

Furthermore, to discuss the proposition outlined, we combined available literature, observation and interviews in the selected research area. In addition, we will try to explore what factors can support and disrupt innovation in order to show more significant results driven by governance innovation theory.

### 3.2.1. Democratic Innovations

According to Anttiroiko, et al. (2011) democratic innovations refer to innovations in political leadership and representation. For example, using civil registration records electronically in Indonesia based on government preparations for a general election in 2014, this is the first e-ID CARD used as a reference to determine number of voters.

However, if we look at the background, national program initiations require policies on legal basis. There is a political mechanism that must meet between the legislative and executive for a policy-making process as well as its application to a single institution. Policies are established and require national-level adjustments, also related to subsequent policies at local level. As an example, DKI Jakarta, has established various local-level policies to encourage civil registration records with innovations of *si dukun* (3 in 1). However, the opposite happened in Aceh Tenggara regency; the local level policy did not appear strong enough to support innovation in civil registration sector. This situation is caused by local governments who are not responsive to the needs of various changes that government demands. This is also produced by leaders behavior who did not pay attention to population administration service, and also due to their

limited innovation knowledge. However, some parts of policy changes can move at different speeds (Siddiquee, 2008), caused by complex problems that encourage ruling regime interests (Hill & Hupe, 2002).

### **3.2.2. Managerial Innovations**

The managerial functions of planning involves goal setting. Managerial innovations ensures availability of resources, collaboration, teamwork, authority decentralization and trust to carry out planned goals (DuBrin, 2006). The managerial ability of a leader greatly influences how to manage. Managerial decisions for technology adoption was a bold action, having many consequences such as budget provision, human resources, and a technology utilization understanding. It seems like this kind of action concentrates more on utilizing information technology in civil registration records that will make it easier to manage, simplify the registration process until document printing.

For example, DKI Jakarta government, in managing civil registration records established a "public service mall" aimed at providing public services, similar to shopping malls. This initiation is not new, but various conveniences offered by government service providers are connected electronically. We consider that this initiation is more productive in presenting public services than existing service models. In addition to giving public services and education, this model attracts more public attention to participate in government efforts to manage public service. However, in Aceh Tenggara regency, although all regencies and cities in Indonesia have used digitization civil registration record, in our observation that governance innovation is not good category. Our findings reveal that no website is used by the public to download registration forms, thus, significantly complicating the registration process. Citizens are forced to find a registration form that is provided by other institutions with additional costs.

### **3.2.3. Development Innovations**

Innovation development requires cooperation between sectors. For example, cooperation with the private sector (advertising on radio, television, and local news portal) provides educational benefits, so that public understands the purpose, function, and innovation benefits (Alberti & Bertucci, 2007). Innovation development includes solutions and potential to overcome substantial service problems. Innovation development is also a transformative action by all stakeholders towards new practice that is more efficient (Anttiroiko, et al, 2011; D'Alvano & Hidalgo, 2011). A tried and tested solution needs to be adjusted and improved upon, exploring new approaches for better development capacity (Daniels, Ustyuzhantseva, & Yao, 2017). Innovation development needs to create inclusive opportunities for the government, private sector, and citizens. The use of technology in organizations indicates a new way to develop, implement, and maintain the use of technology that will improve product quality and productivity (Anttiroiko, et al, 2011; Daniels, Ustyuzhantseva, & Yao, 2017).

### **3.2.4. Service Functions of Government**

The essence of government service function is how the government provides services to meet the needs and interests of the citizens (Hartley, 2005; Denhardt & Denhardt, 2015). However, in good governance, citizen participation as recipients become essential, and how a citizen is giving feedback of the service itself (Alberti & Bertucci, 2007; Anttiroiko, et al, 2011; Osborne & Brown, 2011). The service function is not only understood as government is a service provider, but other factors that affect service can also spring from technology utilization, and the citizen is often placed as a passive recipient. Therefore, public service concept is often equated with services provided by



the government monopolizing rules, implementation, product distribution, and supervision.

If the public service provision depends mainly on joint efforts and coordinated intergovernmental relations, that means public service delivery is still quite isolated. In our investigation of the selected areas indicate that government services function are more open, accessible, and responsive. Therefore, technology provides convenience for coordination, openness, and accessibility through radio, television, computers, information networks such as e-mail and internet. Bogers, Afuah, and Bastian (2010) concluded that technological pace change, globalization, and increasing sophistication of the user and recipient means that more users/recipients will have an opportunity to innovate or contribute. This implies that government domain becomes absolute. Ideally, the government provides control function to ensure that any services are according to normative standards.

### ***3.3. Assessment Civil Registration Record in Indonesia Local Government***

In our investigation, several problems are limiting the management of innovation. It will be very different when innovation is carried out at places with same innovation; there are fundamental problems that affect it. We can identify general problems with empirical investigation:

1. Low level of public participation;
2. Limited Network technology;
3. Limitations of cooperation between various sectors, and also active coordination;
4. Almost no supervision of internal organization that is to verify the innovation;
5. Decision makers that have less understanding of innovation;
6. The initiation of innovation rarely supports local government regulation.

Rules and mechanisms of every country will look different; many people will think that innovation is a complicated initiation as the government needs to adopt private sector principles through research. However, Vries, Bekkers, and Tummers (2015) argued that to do innovation in the government a research section is not needed, but more often manage an innovation culture by institutions with various innovation initiatives. Governance innovation involves complex activity in which many different organization types, stakeholders, knowledge involved in public services delivery (Hartley, 2005). At the same time, there is certain timeliness for any debate on governance innovation, policy, and leaders need to acknowledge the relevance of tradition theme and continuing responsibility for public interest, integrity, honesty, and empathy. However, governance innovation seems to direct policy implementation and government service providers (Anttiroiko, et al, 2011). Some examples of governance innovation in civil registration records from the local government of 2017 may be traced from public service innovation competition (Table 1).

The Table 1 provides information on governance innovation in civil registration records. However, in Indonesia, it needs other effort that maximizes the governance innovation in civil registration record. It requires support from other programs such as collaboration, participation, and cross-sector cooperation that regulate government policies as an effort for governance innovation to be more effective.

Table 1: Civil Registration Record Innovation in Local Government

Local government	Civil registration record innovation	Core public service
<i>DKI Jakarta City</i>	<i>Si Dukun 3 in 1</i>	Collaboration with the hospital, newborn, automatically gets essential public services such as a family card, residency registration number, a social security card.
<i>Batang Hari Regency</i>	Village head election ( <i>PILKADES</i> ) through voting electronic system which uses e-ID Card, a unique number of the family registration, and child born certificate	The efficiency of electronic election
<i>Tanah Datar Regency</i>	Online Anywhere Service	Mobile service
<i>Surakarta City</i>	Record in the school program	The target for 17-year-old

Source: Minister of Administrative and Bureaucratic Reform (Determination Top 99 Public Service Innovations of 2017)

### 3.4. Implementation and Implication of Technology in Civil Registration

Although civil registration records management has been using digitizing, broader results will always be directed to a product in the form of e-ID CARDS and population documents that must be possessed by any person. Dolfsma and Seo (2013) points out that technology can be developed separately regardless of specific knowledge that has been developed in the past or may develop technologies cumulatively. Specific characteristics of technology have not been significantly stimulated by the government when formulating and implementing innovation policies. That is, some government policies have stimulated the use of technology in further innovation, but not for Aceh Tenggara regency with local level policies. However, the use of technology can be taken away by authority intervention, monopolized management control, and absence of research institutions.

For population and civil registration office of Aceh Tenggara regency, technology is utilized not only for civil registration process but is also used for coordination between others government institutions. In our investigation, such uses are only general government activities that can be carried out by technology. To explore the use of technology even further requires a strong reasoning such as urgent need to develop the technology further. Technology utilization adapts existing products and processes to achieve higher productivity levels.

We can assess that appropriate implementation of digitization will be hampered due to various factors. For example, some innovation forms such as population service cars and call centers; technology utilization is not getting desired results and is mainly caused by geographical factors. Geographically this area is comprised of mountainous, and valleys and the distance further isolate sub-districts and regency which is unreachable by technology networks (internet). As a result, population service cars

operation cannot service directly to public because the implementation requires a network that direct connects to a server database. On the other hand, network procurement was regulated by central government involving network operator (operator provider). The selected operators did not reach the entire area in Aceh Tenggara regency.

Therefore, Aceh Tenggara regency tried to centralize services in one sub-district to reach several sub-districts that were identified as difficult to obtain networks. The results of our investigation found that initiation (services in one sub-district) only in a strategic institution plan, never realized. It is a matter of concern that there is no significant support from the policy as a guide. Because innovation implementation requires a budget and also regional leaders' commitment continues to encourage registration acceleration and improve civil registration service. Further, we explore the strategic local government plan, in fact, in 2014-2017, the planning was more directed towards development in infrastructure projects that could provide benefits to a particular group as a priority, and civil registration service was considered not the main priority.

In practice, citizens continue to incur additional costs for transportation to population and civil registration office only to register, and obtain the legal population documents. For citizens on low incomes, such a condition would be difficult and becomes a cause of delays in civil registration data targets; although government policy explicitly mentions that getting population documents are free. This illustrates the low empathy of regional leaders to see various difficulties encountered by citizens. The change in public service initiation, in general, is always initiated by a local leader. However, if tacit and explicit knowledge of a local leader is low then it will be difficult to understand the innovation (see also Polanyi, 2005; Collins, 2010). The political orientation of remuneration for constituents, collusion, and nepotism in government projects tends to be driven by authority, and also low public knowledge will encourage authorities to take advantage of uncritical citizen conditions. At least some local policy can give institutions directions towards implementing innovation execution.

Daniels, Ustyuzhantseva, and Yao (2017) in their study in the BRICS countries (Brazil, Russia India, China and South Africa) found that there were no specific public policies and policy support resulting in gaps and inability to conceptualize innovation as a broader government mechanism, socio-economic and development activities. Therefore, a good political process will contribute to deciding policies and aims to improve social welfare (Simon, 2007) because policy is an outline and basis of plans and implementation (especially about governance, organizations).

On the contrary, things are in favor of citizens of DKI Jakarta, networks (internet) that reach every area and local level policies supporting innovation will make it easier for institutions to continuously improve service quality. In general, almost all over the world, regions close to the country's capital will have a high index (income, knowledge, budget, governance, and infrastructure). Specifically in improving public services, the first thing that needs to be considered is how leader knowledge capacity will drive changes in government activity (innovation context).

DuBrin (2006) divides the leader's ability criteria in to technical, interpersonal, conceptual, diagnostic, and political skill. A technical skill involves understanding and capabilities and includes the budgeting, planning, methods, processes, procedures, or techniques (hard skill). Interpersonal skill is leader's ability to collectively work as a team and build cooperative effort (soft skills). Conceptual skill requires a leader to view an organization as an entity and includes recognizing organizational units as interdependent on each other. Diagnostic skill often requires other skills, because leaders must use technical, human, conceptual, or political skills for problems solving.

Political skill in general, leaders will use political skills to obtain the strength needed to achieve goals.

The empirical evidence indicates that managerial, development, and service function of government are implicitly driven by national policies, however, explicitly these needs to be regulated through local policies. For example, one of primary government functions is to remain in power and by doing so government will not avoid its responsibility and will try to increase its legitimacy in various ways by providing services and protecting its citizens. The population service nationally has been designed by Directorate General Civil Registration Ministry of Home Affairs Republic of Indonesia with "*Semedi*" (one-day finish) and 3 in 1 (integration services). Therefore, city/regency develops innovations in various ways and keeps on trying to provide effective and efficient population administration services.

Although the population service has been designed nationally, our findings in Aceh Tenggara regency suggest the opposite. *Semedi* (one-day finish) for example, cannot be done because of few obstacles and one of the main obstacles is lack of internet network. Of the 16 regencies only six sub-districts are found to have suitable internet network that works well. In addition to procurement, technological maintenance carried out by the central government and the local government remains low and looks just like some user implementing it.

When there is damage with technological tools, reporting procedure is carried out and there is a waiting period to get a response from the central government. Long distances with central government slow down maintenance and repair processes. In contrast, DKI Jakarta is supported by a close proximity to central government so that a quick response is achieved. There is a need for delegation of maintenance authority and placement of technicians in local government. In general, the central government conducts trainings for local government operators and technicians but not for substantial maintenance and improvements.

We acknowledge that the use of technology in civil registration records implementation makes it easy to register and simplifies procedures. Furthermore, in governance innovation concept, citizen participation is essential and their feedback about innovations that have been implemented. Thapa et al. (2015) found that the citizens' involvement in public sector innovations lies in the ability (knowledge) about innovation. However, at least in principle good governance, citizens' participation is needed for decision making. The application of mobile government, open government, provides a broad path and renewal for increasing citizens' participation in government activities, as well as the government's efforts for transformation of current services, budget efficiency, effectiveness, and public service quality.

#### **4. Conclusion**

Innovation is one way to make changes in the government activity. Innovation continues to develop in ways that are easier to implement. We consider the governance innovation will continue to find its form coherently. The current innovation implementation in civil registration records is not just a program, but the use of technology can drive innovation towards effective use. On the other hand, technology plays an essential role in supporting population administration services. It can support cross-institutional coordination, accelerate registration and simplify procedures. Therefore, innovations with technology support must be well managed. Innovation application is not easy, if results are to be achieved innovation needs to be supported by policies, resource capacity, development and citizen participation.

Disturbances such as geographical constraints contribute towards low effectiveness of the use of technology in innovation. Developed countries have established standard

ways such as using satellite directly to get connectivity, however, for a developing country it is a hard thing to do because of limited state budget and national policies. This probably can be overcome by changing service mechanism with primary target of citizen mobilization in a shopping center (DKI Jakarta) or public parks. For an area with geographical constraints (Aceh Tenggara regency), a traditional method such as organization of cultural festivals can stimulate citizens and automatically gather in certain places where population administration services can be carried out. Policy, commitment and knowledge capacity of local leaders become the primary drivers for better governance innovation.

The recommendations that we can propose are that there is a need of cooperation between executive and legislative branches to support innovation initiation. Knowledge commitment and empathy should support this cooperation; not only among different institutions but citizens' participation can be encouraged to provide experience, perception about whether innovation is performing according to expectations. For future researchers, research in a constructive and systematic way regarding other governance innovation factors is expected to reveal obstacles and provide choices that can act as a reference for governance innovation in the public service.

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